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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,362	03/18/2004	Roland Feola	11885-00034-US	5832

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EXAMINER

FEELY, MICHAEL J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/803,362

**Applicant(s)**

FEOLA ET AL.

**Examiner**

Michael J. Feely

**Art Unit**

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12 is/are rejected.
- 7) ☒ Claim(s) 9-11 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0504,0904,1204</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 112*

2. Claims 5 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 12 provides for the use of the water-dilutable binders of claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

This claim should be re-written as: --A method of use of the water-dilutable binders according to claim 1 comprising coating the binders of claim 1 onto substrates selected from the group consisting of metals, mineral substrates, plastics, paper and board.--

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Zengel et al. (US Pat. No. 4,437,960).

Regarding claims 1-8 and 12, Zengel et al. disclose: *(1)* a water-dilutable binder containing the reaction product **ABC** (Abstract) of:

**A** epoxy resins (Abstract; column 4, lines 4-45);

**B** functional compounds capable of reacting with epoxy groups selected from: **B1** compounds with at least one primary or secondary amino group; **B2** compounds with acid groups; and **B3** compounds with phenolic hydroxyl groups (Abstract; column 6, lines 18-31); and

**C** fatty acid amides with at least one amide group and at least one amino group obtained by reacting **C1** fatty acids and **C2** amines with at least one secondary and at least one primary amino group (Abstract; column 4, line 46 through column 5, line 51);

*(2)* wherein **C** contains at least two amide group and at least one secondary amine group (Abstract; column 4, line 46 through column 5, line 51); *(3)* wherein **C1** have 6 to 40 carbon atoms and at least one olefinic double bond (Abstract; column 4, line 46 through column 5, line 51); *(4)* wherein **C2** are linear, branched or cyclic aliphatic amines with 4 to 20 carbon atoms *having* at least one primary and at least one secondary amino group selected from the group

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consisting of **C21** amines with a primary amino group and a secondary amino group and **C22** amines with at least two primary amino group (Abstract; column 4, line 46 through column 5, line 51);

(5) wherein **A** is an aliphatic or aromatic epoxy compounds selected from **A1** monoepoxides selected from the group consisting of glycidyl ethers of aliphatic monohydric alcohols with 4 to 40 carbon atoms and glycidyl esters of aliphatic monocarboxylic acids with 5 to 20 carbon atoms; and **A2** diepoxides selected from the group consisting of glycidyl ethers of dihydric aliphatic alcohols with 4 to 20 carbon atoms, diglycidyl ethers of dihydroxy polyoxyalkylenes, diglycidyl esters of dicarboxylic acids with 2 to 40 carbon atoms, and diglycidyl ethers of divalent phenols (Abstract; column 4, lines 4-45);

(6) wherein **B1** feature amino groups bound to aliphatic carbon atoms, are linear, branched or cyclic having 2 to 40 carbon atoms, and are selected from the group consisting of: **B11** which, apart from at least one secondary or primary amino group, have at least one hydroxyl group; **B12** which have at least one primary and at least one tertiary amino group; and **B13** which have at least two primary amino groups and at least one secondary amino group (Abstract; column 6, lines 18-31); (7) wherein **B2** are aliphatic linear, branched or cyclic monocarboxylic acids with 2 to 40 carbon atoms having at least one olefinic double bond (*not required – scope is still subject to the entire Markush group set forth in claim 1*); (8) wherein **B3** are selected from the group consisting of monophenols and diphenols (*not required – scope is still subject to the entire Markush group set forth in claim 1*); and

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(12) A method of use of the water-dilutable binders according to claim 1 comprising coating the binders of claim 1 onto substrates selected from the group consisting of metals, mineral substrates, plastics, paper and board (Abstract; column 8, lines 5-35).

6. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ciba-Geigy AG. (GB 1295329).

Regarding claims 1-8, Ciba-Geigy AG. Disclose: (1) a water-dilutable binder containing the reaction product **ABC** (Abstract; page 2; Examples) of:

**A** epoxy resins (Abstract; page 2; Examples);

**B** functional compounds capable of reacting with epoxy groups selected from: **B1** compounds with at least one primary or secondary amino group; **B2** compounds with acid groups; and **B3** compounds with phenolic hydroxyl groups (Abstract; page 2; Examples); and

**C** fatty acid amides with at least one amide group and at least one amino group obtained by reacting **C1** fatty acids and **C2** amines with at least one secondary and at least one primary amino group (Abstract; page 2; Examples);

(2) wherein **C** contains at least two amide group and at least one secondary amine group (Abstract; page 2; Examples); (3) wherein **C1** have 6 to 40 carbon atoms and at least one olefinic double bond (Abstract; page 2; Examples); (4) wherein **C2** are linear, branched or cyclic aliphatic amines with 4 to 20 carbon atoms *having* at least one primary and at least one secondary amino group selected from the group consisting of **C21** amines with a primary amino group and a secondary amino group and **C22** amines with at least two primary amino group (Abstract; page 2; Examples);

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(5) wherein **A** is an aliphatic or aromatic epoxy compounds selected from **A1** monoepoxides selected from the group consisting of glycidyl ethers of aliphatic monohydric alcohols with 4 to 40 carbon atoms and glycidyl esters of aliphatic monocarboxylic acids with 5 to 20 carbon atoms; and **A2** diepoxides selected from the group consisting of glycidyl ethers of dihydric aliphatic alcohols with 4 to 20 carbon atoms, diglycidyl ethers of dihydroxy polyoxyalkylenes, diglycidyl esters of dicarboxylic acids with 2 to 40 carbon atoms, and diglycidyl ethers of divalent phenols (Abstract; page 2; Examples);

(6) wherein **B1** feature amino groups bound to aliphatic carbon atoms, are linear, branched or cyclic having 2 to 40 carbon atoms, and are selected from the group consisting of: **B11** which, apart from at least one secondary or primary amino group, have at least one hydroxyl group; **B12** which have at least one primary and at least one tertiary amino group; and **B13** which have at least two primary amino groups and at least one secondary amino group (*not required – scope is still subject to the entire Markush group set forth in claim 1*); (7) wherein **B2** are aliphatic linear, branched or cyclic monocarboxylic acids with 2 to 40 carbon atoms having at least one olefinic double bond (Abstract; page 2; Examples); and (8) wherein **B3** are selected from the group consisting of monophenols and diphenols (*not required – scope is still subject to the entire Markush group set forth in claim 1*).

7. Claims 1-8 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiraishi et al. (JP 63-243170).

Regarding claims 1-8 and 12, Shiraishi et al. disclose: (1) a water-dilutable binder containing the reaction product **ABC** (Abstract) of:

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**A** epoxy resins (Abstracts: Derwent & JPO);

**B** functional compounds capable of reacting with epoxy groups selected from: **B1** compounds with at least one primary or secondary amino group; **B2** compounds with acid groups; and **B3** compounds with phenolic hydroxyl groups (Abstracts: Derwent & JPO); and

**C** fatty acid amides with at least one amide group and at least one amino group obtained by reacting **C1** fatty acids and **C2** amines with at least one secondary and at least one primary amino group (Abstracts: Derwent & JPO);

(2) wherein **C** contains at least two amide group and at least one secondary amine group (Abstracts: Derwent & JPO); (3) wherein **C1** have 6 to 40 carbon atoms and at least one olefinic double bond (Abstracts: Derwent & JPO); (4) wherein **C2** are linear, branched or cyclic aliphatic amines with 4 to 20 carbon atoms *having* at least one primary and at least one secondary amino group selected from the group consisting of **C21** amines with a primary amino group and a secondary amino group and **C22** amines with at least two primary amino group (Abstracts: Derwent & JPO);

(5) wherein **A** is an aliphatic or aromatic epoxy compounds selected from **A1** monoepoxides selected from the group consisting of glycidyl ethers of aliphatic monohydric alcohols with 4 to 40 carbon atoms and glycidyl esters of aliphatic monocarboxylic acids with 5 to 20 carbon atoms; and **A2** diepoxides selected from the group consisting of glycidyl ethers of dihydric aliphatic alcohols with 4 to 20 carbon atoms, diglycidyl ethers of dihydroxy polyoxyalkylenes, diglycidyl esters of dicarboxylic acids with 2 to 40 carbon atoms, and diglycidyl ethers of divalent phenols (Abstracts: Derwent & JPO);

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(6) wherein **B1** feature amino groups bound to aliphatic carbon atoms, are linear, branched or cyclic having 2 to 40 carbon atoms, and are selected from the group consisting of: **B11** which, apart from at least one secondary or primary amino group, have at least one hydroxyl group; **B12** which have at least one primary and at least one tertiary amino group; and **B13** which have at least two primary amino groups and at least one secondary amino group (*not required – scope is still subject to the entire Markush group set forth in claim 1*); (7) wherein **B2** are aliphatic linear, branched or cyclic monocarboxylic acids with 2 to 40 carbon atoms having at least one olefinic double bond (*not required – scope is still subject to the entire Markush group set forth in claim 1*); (8) wherein **B3** are selected from the group consisting of monophenols and diphenols (Abstracts: Derwent & JPO); and

(12) A method of use of the water-dilutable binders according to claim 1 comprising coating the binders of claim 1 onto substrates selected from the group consisting of metals, mineral substrates, plastics, paper and board (Abstracts: Derwent & JPO).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ciba-Geigy AG. (GB 1295329) in view of Zengel et al. (US Pat. No. 4,437,960) and Shiraishi et al. (JP 63-243170).

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The GB reference discloses on page 2, “The stable preparations obtained according to the invention can be used *for various purposes*, above all for finishing textiles,” (*see page 2, lines 59-60*). Hence, they do not explicitly disclose the substrates set forth in instant claim 12.

The teachings and the analogous nature of Zengel et al. and Shiraishi et al. are as set forth above and incorporated herein, wherein they both disclose substrates presented in claim 12. In light of this, it has been found that the selection of a known material based on its suitability for its intended use supports a *prima facie* obviousness determination – *see MPEP 2144.07*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to coat the substrates set forth in instant claim 12, as taught by Zengel et al. and Shiraishi et al., with the coating of the GB reference because the teachings of Zengel et al. and Shiraishi et al. demonstrate that these substrates are recognized in the art as suitable for use with this type of coating composition.

#### ***Allowable Subject Matter***

10. Claims 9-11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

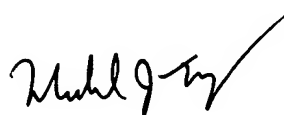
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***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael J. Feely  
Primary Examiner  
Art Unit 1712

June 23, 2006

**MICHAEL FEELY  
PRIMARY EXAMINER**